9. (Amended) The payload isolation system of claim 8, wherein the at least one scissor linkage comprises two or more scissor linkages, at least two of the two or more scissor linkages being configured non-parallel to each other.

21. (Amended) The payload isolation system of claim 20, wherein the support means comprises:

a deformable mat having at least one internal tubular cavity; and wherein the support adjustment means comprises:

a gas source in communication with the at least one internal cavity;

wherein the feedback means controls the gas pressure level in the internal tubular cavity in response to the change in relative distance between the payload and the base structure.

23. (Amended) The payload isolation system of claim 20, wherein the support adjustment means comprises:

a deformable mat having at least one internal tubular cavity; and

a ramp means for engaging the deformable mat to vary an amount of surface area in contact with the payload; and

drive means for driving the ramp means between locations varies an amount of surface area in contact with the payload;

wherein the feedback means controls the drive means to change the amount of surface area in contact with the payload.

Sub b3

36. (Amended) A method of constraining motion between a payload and a base structure, the method comprising the steps of:

providing a first mechanical linkage disposed between the payload and the base structure;

A7

providing at least a second mechanical linkage disposed between the payload and the base structure; and

arranging the first and at least second mechanical linkages relative to each other such that the first and at least second mechanical linkages maintain a parallel relationship between the payload and the base structure.

Sub b4

39. (Amended) A support apparatus for providing vertical and/or lateral support of a payload relative to the base structure such that the transmission of vertical and/or lateral vibration between the payload and the base structure are suppressed, the support apparatus comprising:

A8

a deformable member exhibiting nonlinear elastic characteristics in response to an effective payload weight;

support means for supporting the effective payload weight; and

effective payload adjustment means for adjusting the level of support of the support means in response to a varying effective payload weight.

REMARKS

Reconsideration of this application, as amended, is respectfully requested.